

## **Supplementary Information**

### **A significant causal association between C-reactive protein levels and schizophrenia**

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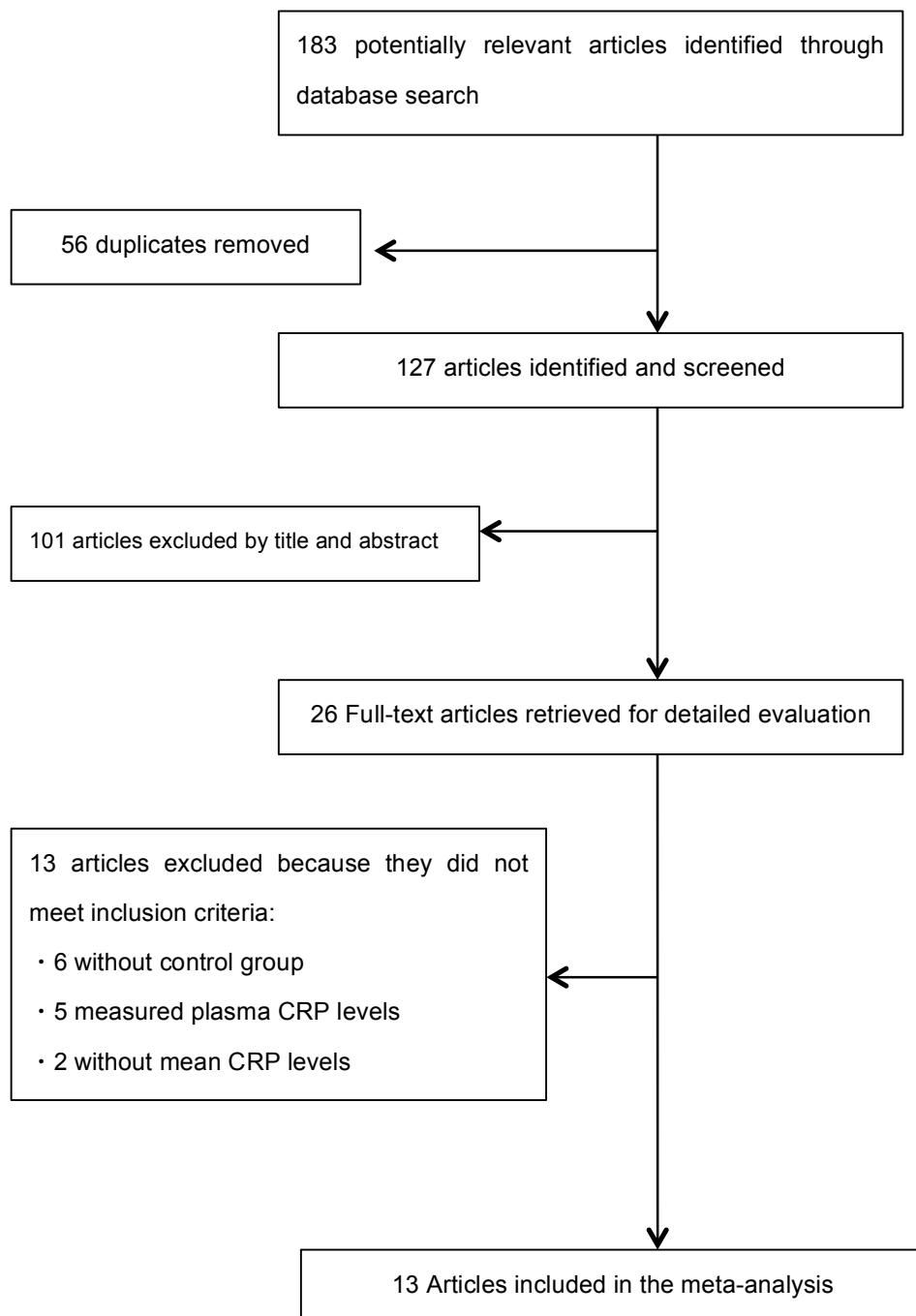
**Supplementary Table1.** Studies included in the meta-analysis

Author	Study area	Number of cases	Mean CRP value of cases	SD of cases	Number of controls	Mean CRP value of controls	SD of controls
Shcherbakova et al. 1999	Russia	15	22	5.6	12	4.3	3.5
Sarandol et al. 2007	Turkey	40	0.19	0.21	35	0.28	0.47
Akanji et al. 2009	Kuwait	207	0.62	7.78	165	0.33	2.88
Fernandez-Egea et al. 2009	Spain	50	0.21	0.28	50	0.2	0.18
Severance et al. 2009	USA	10	7.32	3.45	10	7.31	4.14
Fawzi et al. 2011	Egypt	200	3.3	1.4	200	1.4	0.7
Suvisaari et al. 2011	Finland	45	2.5	2.8	45	1.7	3.3
Dickerson et al. 2013	USA	295	1.85	2	228	0.99	1.15
Joshi et al. 2013	India	45	4.1	3.1	41	2.63	0.9
Lin et al. 2013	Taiwan	36	1.4	1.5	36	0.9	1.4
Klemettilä et al. 2014 (Male)	Finland	106	3.58	5.28	403	1.33	1.48
Klemettilä et al. 2014 (Female)	Finland	82	4.71	5.04	500	1.48	1.45
Joseph et al. 2015	USA	88	4.3	5.4	71	2.3	3.8
Konasale et al. 2015	USA	37	19.78	23.53	27	15.69	21.69
This study	Japan	408	0.36	0.81	1247	0.12	0.34

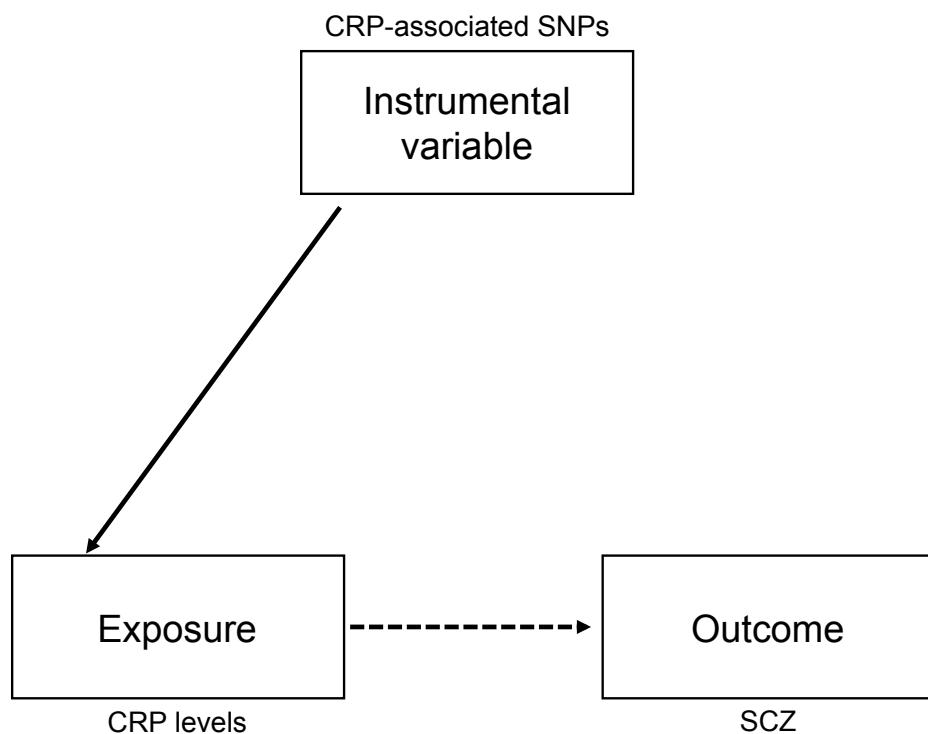
**Supplementary Table2.** The estimates for gene-serum CRP association and gene-schizophrenia association for each of 15 SNP

SNP	Per allele increase in CRP (number of SDs) (SE; p-value)	Per allele OR for schizophrenia (SE; p-value)
rs2794520	0.16 (0.006; $2.0 \times 10^{-186}$ )	1.022 (0.011; 0.046)
rs4420638	0.236 (0.009; $8.8 \times 10^{-139}$ )	0.991 (0.015; 0.557)
rs1183910	0.149 (0.006; $2.1 \times 10^{-124}$ )	1.028 (0.011; 0.013)
rs4420065	0.09 (0.005; $3.5 \times 10^{-62}$ )	1.023 (0.011; 0.042)
rs4129267	0.079 (0.005; $2.1 \times 10^{-48}$ )	0.990 (0.042; 0.815)
rs1260326	0.072 (0.005; $4.6 \times 10^{-40}$ )	0.994 (0.011; 0.569)
rs12239046	0.047 (0.006; $1.2 \times 10^{-15}$ )	1.003 (0.011; 0.759)
rs6734238	0.05 (0.006; $1.8 \times 10^{-17}$ )	1.003 (0.011; 0.805)
rs9987289	0.069 (0.011; $3.4 \times 10^{-13}$ )	1.087 (0.019; $9.22 \times 10^{-6}$ )
rs10745954	0.039 (0.006; $1.6 \times 10^{-11}$ )	0.975 (0.011; 0.018)
rs1800961	0.088 (0.015; $2.2 \times 10^{-9}$ )	0.970 (0.03; 0.306)
rs340029	0.032 (0.006; $4.1 \times 10^{-9}$ )	1.004 (0.011; 0.702)
rs10521222	0.104 (0.015; $8.5 \times 10^{-13}$ )	1.009 (0.033; 0.780)
rs12037222	0.045 (0.007; $6.4 \times 10^{-11}$ )	0.991 (0.013; 0.458)
rs13233571	0.054 (0.009; $3.6 \times 10^{-9}$ )	0.987 (0.017; 0.434)

**Supplementary Figure1.** Flowchart of Study Selection Process by a PRISMA checklist

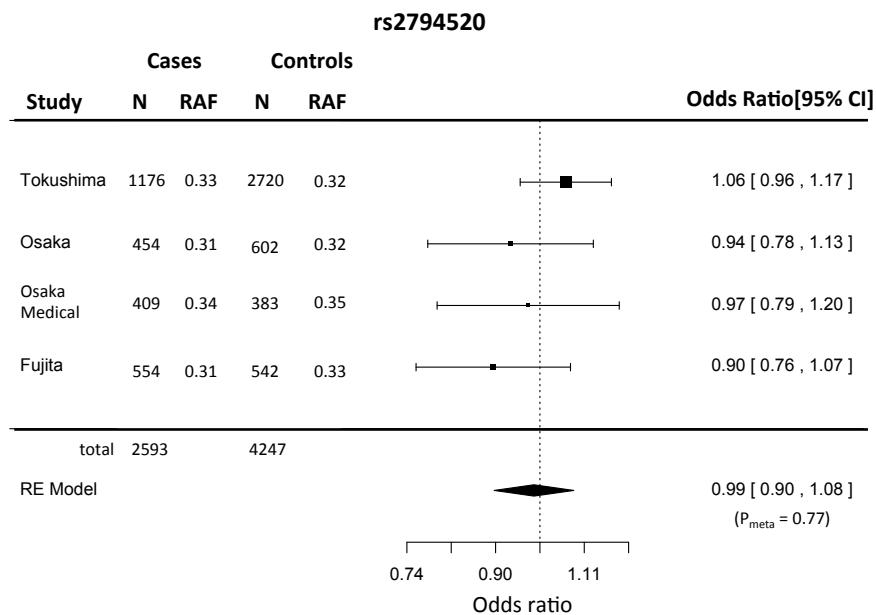


**Supplementary Figure2.** Graphical representation of our Mendelian randomization approach.



**Supplementary Figure3.** The result of the association SNPs with schizophrenia in meta-analysis in the Japanese population

(A)



(B)

